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RE: Biomass Policy

Dear Dr. Breger:

Thank you for the courage to revisit the wisdom of granting publicly funded subsidies for biomass burning.

I am a registered professional engineer in four states with an M.S. in Environmental Engineering, a Ph.D. in Civil Engineering, and nearly 30 years of professional environmental engineering experience. I sent a comment letter previously (July 9, 2010) and also spoke at the July 27, 2010 Boston meeting, but wanted to add or expand on a few points.

1. It is incredibly important to compare biomass burning not only to combustion technologies (which we are trying to avoid, notably coal burning) but to all the available alternatives. Why would we not want to do this? Part of making an informed choice is to evaluate all the options, not just some,
2. Energy technologies should be subsidized only to the degree (if any) to which they are benign to human health and the environment. Biomass plants do not score well and do not deserve any subsidies - they are not superior to other combustion technologies and are inferior to many combustion-free options. We need to bite the bullet and move away from combustion. I know it seems difficult, but it is necessary and likely not to be as difficult as it may seem. Plus it is a matter of survival. Other alternatives exist and are waiting to be developed. The U.S. is lagging in energy technology development, stuck in the past (combustion) and at least 10 years behind many other countries. It's not in our best interests to follow rather than lead here (any more than it's good to be dependent on foreign oil).
3. In addition to looking at all the energy options, we need to look at multiple aspects of all the options to make an intelligent decision. Other air pollutants, water impacts, forest impacts, and many other factors should be considered in decision making. When you do this, you see the vast superiority of conservation and efficiency measures over any other option. C&E should be rewarded and subsidized to the greatest degree of any option. You also see the superiority of other combustion-free technologies over combustion technologies.

4. Traditional air pollutants from biomass burning are a fatal flaw. If children die as a result of biomass burning -- you have seen the statements of doctors such as the Massachusetts Medical Society -- do we really want to subsidize and promote it?
5. Public input on the Manomet study was inadequate. We could have comments considered on the scope of work but not on the work product itself. The work product was flawed and there was no way for the public to know before the thing was a done deal. The study was biased in a number of ways, for example by not including carbon releases from increased soil disturbance. (See Dr. Booth report for analysis.)
6. RECs could be granted to landowners who leave healthy forests alone. Landowners need a way to put their land to work and produce revenue, and we need the services the trees provide (notably here, carbon sequestration). This is classic supply and demand and worth money (e.g. United Nations REDD Program [Reducing Emissions from Deforestation and Forest Degradation in Developing Countries]). Let's pay them to not cut rather than to cut, as is starting to take place in other parts of the world. Why not here?
7. The REC system needs to include RECs for individuals and businesses to do C&E, (truly) clean energy, and also to keep their forests (truly) healthy and sucking up that carbon dioxide being emitted by the technology we are moving away from -- a good bridge measure. Now is exactly the wrong time to reduce carbon sequestration capacity as we are changing to combustion-free technology! We desperately need carbon sequestration the most right this minute -- it is suicidal to push it off to later.
8. Combustion technologies need to be eliminated from the REC system -- this is precisely what we are trying to avoid! Combustion converts carbon and oxygen to carbon dioxide -- there is no getting around it. You can only sequester it. Guess how? Trees!
9. RECs should not be limited to big centralized power plants. People who get solar panels, for example, should get RECs every year in addition to subsidies for capital costs (and savings on electric bills). The government would thereby reward decentralized energy generation all over the grid, in addition to the more traditional centralized power plants, similar to the system of countless PCs connected by the internet.

People can go ahead and burn biomass. We're just saying they don't deserve "extra credit" from the public in the form of public subsidies for doing so. Just as I don't expect you to pay me for using a wood stove. The public benefit simply is not there.

Very truly yours,



Ellen Moyer, Ph.D., P.E.